The Environmental Code

Extensive work has now continued for almost a decade with the reform of Swedish environmental law. The Social Democratic Government was able finally in December 1997 to present a proposal for an Environmental Code to the Riksdag (Swedish Parliament) (Government Bill 1997/98:45). The proposal was supported by the Environmental Party and the Left Party. The Government has subsequently handed over a proposal for consequential legislation to the Riksdag (Government Bill 1997/98:90). The Riksdag will deal with the proposal during the spring of 1998. In parallel with the Riksdag procedure, the Government Offices are undertaking major work to produce ordinances under the Environmental Code. It is intended that the Environmental Code and the other legislative amendments will enter into force on 1 January 1999.

Major legislation

The rules contained within 15 acts have been amalgamated in the Environmental Code. The acts are

- the Natural Resources Act,
- the Nature Conservancy Act,
- the Flora and Fauna (Measures Relating to Protected Species) Act,
- the Environmental Protection Act,
- the Health Protection Act,
- the Water Act,
- the Agricultural Land Management Act,
- the Genetically Modified Organisms Act,
- the Chemical Products Act,
- the Biological Pesticides (Advanced Testing) Act,
- the Pesticides (Spreading over Forest Land) Act,
- the Fuels (Sulphur Content) Act,
- the Public Cleansing Act,
- the Dumping of Waste in Water (Prohibition) Act, and
- the Environmental Damage Act.

As many similar rules in current statutes have been replaced with common rules, the number of provisions has reduced. The Environmental Code is nonetheless a major piece of legislation. The Code contains 33 chapters comprising almost 500 sections. However, it is only the fundamental environmental rules that are included in the Environmental Code. More detailed provisions will be laid down in ordinances, which are made by the Government.

Three reasons to enact an Environmental Code

The present environmental legislation is difficult to comprehend

The present Swedish environmental legislation consists of a multitude of statutes. Those who conduct operations that may be harmful to the environment must comply with rules under several statutes. Different acts contain rules on how the activity is to be conducted and concerning permit requirements. It is difficult for those conducting activities, public authorities and other to comprehend the regulatory structure. A considerable improvement is effected by the Environmental Code as the main environmental statutes have been amalgamated.

At present a number of operations are inadequately regulated

Several of the most environmentally destructive operations are inadequately regulated at present. Roads and railways may be mentioned as examples. Through the Environmental Code, the same fundamental requirements will be placed on all operations.

New environmental problems have been discovered

Sweden is a pioneer in the environmental field and has been so for many years. For example, a satisfactory regulation of point discharges from industry and similar environmentally hazardous activities has existed for almost thirty years. However, in recent years interest has focused on the aggregate environmental effect of many diffuse sources of pollution, for example, from road traffic. The Environmental Code regulates all operations that contribute to a poor environment.

PART ONE Overall provisions

The objectives and scope of the Environmental Code (Chapter 1)

The Environmental Code opens with provisions on the objectives of the Environmental Code. These provisions are of fundamental importance for the interpretation of the substantive provisions of the Environmental Code, not least the general rules on consideration.

The provisions of the Environmental Code are aimed at promoting sustainable development whereby present and future generations will be guaranteed a healthy and good environment. Sustainable development is based on the insight that nature is worthy of protection and that the right of humans to alter and utilise nature is linked to responsibility to manage nature well.

The Environmental Code will be applied so that

- the health of humans and the environment is protected against damage and nuisance, irrespective of whether these are caused by pollution or other influences,
- valuable natural and cultural environments are protected and conserved,
- biological diversity is preserved,
- land, water and the physical environment generally are used so that, from an ecological, social, cultural and socio-economic viewpoint, the long-term good management of resources is assured, and
- reuse and recycling together with other management of material, raw materials and energy are promoted so that an eco-cycle is attained.

The Environmental Code has a wide scope. It is not possible to specify the scope in any particular section. Instead, the scope is indicated by the rules themselves.

The fundamental rules of the Environmental Code apply, in principle, to all human activity that may harm the environment. The general rules of consideration are the most central provisions. These indicate that operations must be conducted and measures taken so that harm to the health of humans and the environment is averted. Simultaneously, the efficient management of land, water and other resources is promoted. Unless otherwise provided, the rules of the Environmental Code apply to all operations and measures that affect the environment. It is immaterial whether the operation or measure takes place as part of a commercial operation or if it is conducted by a private individual. Thus, the Environmental Code applies to everything from major projects, such as building and operating hydroelectricity plants or motorways, to small individual measures, such as washing a car with detergents or composting household waste.

However, many provisions in the Environmental Code have a more limited scope. There is a need of special provisions in certain fields. Special provisions exist, for example, on protected geographical areas, water undertakings, genetic technology and handling of chemicals.

Many operations that fall within the scope of the Environmental Code are also subject to other acts. Examples of such operations include the construction of roads and railways, mining and forestry. The Environmental Code applies in parallel with these other acts, in these cases the Roads Act, Railway Construction Act, Minerals Act and Forestry Conservation Act. Those who build roads or railways, mine minerals or conduct forestry operations must thus observe the rules of both the Environmental Code and the special act.

General rules of consideration, etc. (Chapter 2)

Chapter 2 contains general rules of considerations applicable to all measures, except those of negligible significance for the individual case. This is a major change compared to the current law. At present, similar rules are only found for special fields, for example, environmentally dangerous activities, water undertakings and handling chemicals. Furthermore, the present rules do not impose the same requirements as the rules of consideration in the Environmental Code.

Whether the measure is taken within the framework of a commercial operation or not is of no importance. Nor is it of any importance whether the operation requires a permit or not. The rules of consideration must be observed by everybody, irrespective of any intervention on the part of a public authority. The rules lay down common requirements for all activities that involve a risk of harm to the environment.

The party exercising the activity is, through the consideration of permits and similar procedures and supervision, liable to prove that the general rules of consideration of the Environmental Code are complied with. Thus, the burden of proof is reversed.

Precautionary measures

The fundamental rule for consideration in the Environmental Code means that everybody who is to take a measure must perform those protective measures, observe the limitations and take the precautionary measures that are required in order that the measure will not harm health of the environment. The rule is a natural consequence of the Polluter Pays Principle (PPP) prepared by the OECD in the early 1970s. The obligation to take precautionary measures is also closely linked to the internationally recognised precautionary principle. According to this principle, precautionary measures must be taken as soon as there is reason to assume that a measure may injure human health or the environment. The person conducting the operation cannot excuse himself by the absence of complete scientific evidence that harm arise.

Examples of appropriate precautionary measures include: the minimisation of emissions by the use of a particular filter or careful purification of waste water; that garden waste is not burned during unfavourable wind conditions; the erection of noise barriers; that chemicals are dealt with on a hard surface so that spills do not penetrate the ground; that dams are built in accordance with safety requirements and without constituting migration obstacles to fish; that the number of animals in agriculture is limited; or that a person arranging outdoor recreation for others informs the participants about the meaning of the right of common access (everybody's right - Sw. Allemansrätten). When an activity requires a permit, it will be appropriate to impose conditions under the section.

Best possible technology

Commercial operations must apply the best possible technology to avoid damage. The technology must, from the technical and financial viewpoint, be industrially feasible to apply within the trade in question. This means that it must be available and not only exist at an experimental stage. However, the technology does not have to be located within Sweden. In the case of existing activities, a certain transitional period is sometimes required for the introduction of equipment corresponding to what is considered to represent the best possible technology.

Knowledge

It is reasonable that a party intending to commence an operation first acquires the knowledge required to determine the environmental effects that may arise. There is a special rule concerning this. There is, of course, a difference in the requirements that may be imposed concerning a private individual's knowledge of the effect of various everyday measures on the environment and the requirements that may be imposed on someone responsible for operating industrial activities when choosing, for example, various chemical products required for the activity. However, it is always the possible effect of a measure, and not whom it is that takes it, which determines which knowledge is necessary.

Localisation principle

The choice of place is of great importance for which environmental disturbances arise. As regards operations and measure that utilise land or water areas, except where entirely temporarily, a place must be chosen that is suitable having regard to the objectives and resource management provisions of the Environmental Code.

Sometimes, several places may be suitable for an activity. When choosing between these places, such a place must be chosen whereby the purpose may be attained with the least intrusion and nuisance to human health and the environment. Thus, the best place must be chosen.

Examples of factors that are relevant for the choice of place include sensitivity to discharges to areas of water, nature conservation at the place where the operation is to be conducted and the distance to housing areas.

The localisation provision is of greatest significance when a place is to be chosen for an operation that has not yet commenced. However, the provision also applies to the extension of existing installations. It will also be applied when reconsidering permits. In that case, requirements may be imposed for relocation. However, the requirements laid down must not be unreasonable.

The resource management and the eco-cycle principles

Everybody conducting an operation or taking measures must conserve raw materials and energy and also utilise opportunities of reuse and recycling. In the first instance renewable sources of energy should be utilised. The provision represents the resource management and eco-cycle principles.

As regards both of the principles, the best effects are achieved in conjunction with design and manufacture. The provisions will be applied, *inter alia*, when considering permits for environmentally hazardous activities. This extends the ambit of permit considerations compared with today.

The product choice principle

Everybody who is to take a measure must avoid using or selling chemical products or biotechnical organisms that can harm human health or the environment, if these may be replaced with such products or organisms that may be assumed to be less hazardous. Corresponding requirements apply as regards goods containing or which have been dealt with a chemical product or biotechnical organism. The provisions express the product choice principle, or the substitution principle as it was previously known.

Chemical product means a chemical substance or preparation of chemical substances. Biotechnical organism means a product that has been specially produced to act as a pesticide or for some other technological purpose or which completely or partially consists of or contains living micro-organisms, nematodes, insects or spiders.

An assessment must be made in every individual case. Prohibition of the use or sales can never be imposed generally for a product, organism or goods. Instead, general prohibitions of chemical products that are so hazardous that they cannot be permitted under any circumstances, and also prohibitions of such products where equally effective substitutes involve a manifest advantage from the environmental viewpoint, may be imposed under the provisions of the chapter of the Environmental Code dealing with chemical products.

It should be observed that the product choice principle does not only apply to commercial sale or use. The rule also applies to a private individual who takes a measure. When a car owner washes his/her car and is to purchase detergents for this at a garage, he/she must choose the substance that is the least hazardous to the environment as possible yet nevertheless cleans the car. A correct choice presupposes that the goods are labelled in such a manner that the consumer obtains correct information about the properties of the product. Rules concerning this are included in the chapter on chemical products and biotechnical organisms.

Reasonableness rule

The requirement of consideration contained in the rules of consideration described here apply to the extent that it may not be regarded as unreasonable to satisfy them. When making this assessment, the benefit of the precautionary measures is compared with the expense of such measures. Balancing these must not mean that an environmental quality norm is neglected. It is the task of the party conducting the operation to show that the expense of the measure is not environmentally justified or that it is unreasonably burdensome.

The nature of the nuisance, together with the hazard involved and its magnitude, is of course important when assessing reasonableness. Furthermore, the level of sensitivity of the area where the influence will take place and the sensitivity of those exposed to the disturbance are factors which must be taken into account. Special requirements may be imposed, for example, in an area that is already subject to severe burdens or an area containing rare fauna or flora. Furthermore, it is more pressing to limit noise in housing areas than in industrial areas.

The stop rule presented below states the lowest level that may be required from the viewpoint of health and environment. There can never be any question of limiting this requirement for the operation so that this level is not achieved, irrespective of the cost of the measures required to attain this minimum level.

Liability to remedy damage

The principle that the polluter pays involves a liability for a party who has caused environmental damage to remedy the damage. Therefore, under a special rule, everyone who has taken a measure that has caused damage to the environment is liable to remedy the damage. This applies irre-

spective of whether the operation has been discontinued or transferred. The liability applies until the nuisance has ceased. The scope of the liability is regulated in detail by Chapter 10.

The provision does not always mean that it is the party who is responsible who must take the actual measures to remedy the damage. In some instances a better result may be attained by the liability relating to the expense of the remedy.

The stop rule

The Environmental Code's rules of consideration impose stringent requirements. Nonetheless, it cannot be excluded that an operation that satisfies these requirements has such effects on the environment that the operation cannot be accepted. A stop rule is therefore required which ensures that operations may not be conducted that have unacceptable consequences. It should be able to apply the stop rule as a last resort to ensure that acceptable protection of human health and the environment is attained.

According to the stop rule, measures that may cause damage of substantial importance to human health and the environment may only be taken if there are special reasons. Only the Government can grant exceptions under the stop rule. The Government may then set the nuisance in relation to the social benefit of the operation. It must be possible to prove that the operation involves advantages that from the public or individual viewpoint clearly outweigh the nuisance. Examples of operations that may involve exceptions from the stop rule include installations for dealing with hazardous waste, for example, to deal with batteries containing lead, certain transport installations of great importance to the infrastructure and certain defence installations.

If there is a risk that a large number of people will be subject to a substantial deterioration in their living conditions or a risk of a significant deterioration of the environment, the power of the Government to issue exceptions is further limited. The operation must in that case be of extraordinary importance from the public viewpoint. A relaxation may never be granted if the operation may be feared to cause a deterioration of public health generally.

Fundamental provisions for management of land and water areas (Chapter 3)

Chapter 3 of the Environmental Code includes fundamental provisions for the management of land and water areas. These provisions must be applied when considering permits and similar procedures under the Environmental Code and a number of other acts, including, *inter alia*, the Planning and Building Act, the Roads Act and the Minerals Act.

The main rule is that land and water areas must be used for the or those purposes for which the areas are more suited having regard to their nature and location together with existing needs. Preference shall be given to such use as involves, from the public viewpoint, good management. Major land and water areas that are not at all or only insignificantly affected by extraction operations or other intrusion into the environment must be protected as far as possible from measures that can manifestly influence the nature of the area.

Following that a list is given of land and water areas that are in particular need of protection, for example, because they are sensitive from the ecological viewpoint, contain valuable minerals or are especially suited for industrial installations. Such areas must as far as possible be protected against measures that may harm these interests. If the areas are of national interest, the protective principle is absolute. The areas that are of national interest will be identified through collaboration between various public authorities.

Special provisions for management of land and water for certain areas of Sweden (Chapter 4)

Chapter 4 of the Environmental Code contains special provisions for management of land and water for certain areas of Sweden. Geographical areas are listed that are, in their entirety, considered to be of national interest for various purposes. For example, it may be mentioned that hydro-electricity plants and similar water undertakings may not be conducted in the River Torneå, River Kalix, River Piteå and River Vindel nor in a number of other specially listed lengths of river and watercourses.

Furthermore, the area Ulriksdal-Haga-Brunnsviken-Djurgården in Stockholm is a national city park. Within the park, new building may only take place and other measures taken if this can be done without intruding into the park landscape or natural environment and provided that the natural and cultural value of the historical landscape is not otherwise impaired.

Environmental quality norms (Chapter 5)

An important new provision in the Environmental Code is the possibility to introduce environmental quality norms. According to these rules, the Government may issue regulations for certain geographical areas or for the whole of Sweden on the quality for land, water, air or the environment generally, if this is necessary for the long-term protection of human health or the environment or to alleviate damage. Such regulations are referred to as environmental quality norms. Norms that Sweden is liable to introduce under EC rules may also be issued by authorities other than the Government.

Environmental quality norms will specify the levels of pollution and level of disturbance that humans may be exposed to without risk of nuisance of significance or which the environment or nature may be subjected to without danger of manifest nuisance. The levels of environmental quality norms may not be contravened after a certain stated time. The norms must specify, for example, the maximum or minimum amounts of chemicals in land, water or air or the maximum levels of noise. Environmental quality norms may also state the highest or lowest water levels or flows in a watercourse or the highest or lowest amount of water in an organism to serve as a guide for assessing the condition prevailing in the environment.

The Environment Protection Agency has proposed that environmental quality norms are introduced for sulphur dioxide, nitrogen dioxide and lead in outdoor air. The Agency will continue its work and propose additional norms. It is significant to the work with producing environmental quality norms that Sweden, as a member of the EU, is obliged to have certain norms.

Public and local authorities must ensure that environmental quality norms are attained when they consider permits and similar approvals. This applies both to determinations under the Environmental Code and to other acts, for example, the Planning and Building Act, Roads Act and Nuclear Technology Act. A permit may not be issued for an operation that contributes to an environmental quality norm being contravened. Furthermore, a permit may be reconsidered if the operation contributes to a material extent to an environmental quality norm being contravened.

Even when public and local authorities exercise supervision or issue regulations, environmental quality norms must be satisfied. The norms must also be observed when projecting and planning. Municipal plans under the Planning and Building Act may not be issued in contravention of the norms. A programme of measures must be prepared if necessary to attain the environ-

mental quality norm or if a programme of measures is called for under EC law. The programme of measures is prepared by the Government of another authority or municipality.

The programme of measures must state the measures that are to be taken to satisfy the environmental quality norms, which authorities and municipalities must ensure that these measures are taken and when the measures are to be implemented. Examples of measures that may be prescribed include: requiring applications to be made for the reconsideration of permits for existing operations; the issue of rules for operations that do not have a permit; contact been made with other countries that have activities affecting the norm; economic control mechanisms being applied; and educational/training measures.

The programme of measures is as such not binding for individuals. Consequently, a right of appeal against such a programme has not been included. However, the Government may decide that particular programmes of measures must be considered by the Government. For example, this may apply to programmes of measures affecting national defence and to programmes of measures required according to EC directives.

When an authority or municipality has prepared a programme of measures, it should inform those affected. This may, by way of example, be implemented through advertisements in local and national newspapers.

The programme of measures must be reconsidered if necessary, and in any event, every fifth year.

Environmental impact statements and other basis for decisions (Chapter 6)

When making permit decisions and other decisions that are of significance for the protection of human health and the environment and the resource management of land, water and other resources it is important that the preconditions for the environment are taken into account. Decisions should therefore be based on an analysis of the impact of the decision on these interests. This is achieved by environmental impact statements (EIS). The rules on environmental impact statements are made substantially more stringent in the Environmental Code.

The purpose of an environmental impact statement is to provide a better basis in preparation of a decision. The statement should be included as part of the basis for the decision and facilitate an overall assessment of a planned operations effect on the environment, health and management of natural resources. In order to achieve this objective, questions concerning the effect on the environment must be raised at an early stage and be included as part of the basis for decision during the entire process leading to the permit decision. The consequences for the environment must from the outset influence deliberations and negotiations preceding the decision. The sector of the public affected must at a similarly early stage be afforded an opportunity of participating and influencing the work with the environmental impact statement.

The procedure for preparation of an environmental impact statement and the requirements for these are dealt with in Chapter 6 of the Environmental Code. These provisions are applied in the event of, *inter alia*, permit procedures under the Environmental Code and in accordance with rules prescribed by other statutes, for example the Roads Act, Railway Construction Act and the Minerals Act.

According to the rules of the Environmental Code on environmental impact statements, everyone who intends to take a measure that requires a permit must consult, at an early stage, with the county administrative board and private parties who may be assumed to be particularly affected. Following consultation, the county administrative board must decide whether the measure can be assumed to involve a significant impact on the environment. The Government will prescribe that particular types of measures may always be assumed to involve a substantial environmental impact.

A decision that a measure may be assumed to have a substantial environmental impact involves a start signal for a procedure with an environmental impact assessment. The person conducting the operation must then also consult other government authorities, municipalities and organisations together with the public widely. Consultation will relate to the localisation, extent, design and environmental impact of the measure together with the content and preparation of the environmental impact statement. It is only following these steps that an environmental impact statement can be completed and an application for a permit made.

There are mandatory requirements relating to the content of environmental impact statements in the case of measures that may be assumed to involve a substantial environmental impact. Such statements must contain, *inter alia*, information required to assess the environmental impact, a description of the measures planned to avert damage and a report concerning alternative places and alternative designs. As regards measures that cannot be assumed to involve substantial environmental impact, this same information is included in the statement to the extent considered necessary having regard to the nature and extent of the measure.

When an environmental impact statement has been prepared in a case concerning an environmentally hazardous activity or water undertaking, public notice of this must be given together with the application. Public notice of the environmental impact statement must also be given in other matters if the activity may be assumed to cause substantial environmental impact. Following that, the application and the environmental impact statement must be held available for the public, who are also afforded an opportunity of expressing their wishes.

The permit authority must in a special decision or in conjunction with a determination of the matter decide on whether the environmental impact statement satisfies the requirements of the Environmental Code. A decision on this may not be appealed against separately. The authority must take the content of the statement into account when they consider the application.

The party conducting the operation must pay for the environmental impact statement and the procedure with environmental impact assessment.

The chapter on environmental impact statements concludes with special provisions about plans and the documentary basis for plans. Every authority responsible for applying the Environmental Code must, according to these provisions, ensure that such plans under the Planning and Building Act and such documentary planning bases as are required to demonstrate issues concerning land and water management are available in the matter. The county administrative board is charged with the task of compiling such planning information.

PART TWO
Protection of nature

Protection of areas (Chapter 7)

National parks

A land or water area belonging to the State may, with the consent of the Riksdag, be declared to be a national park. The purpose is to preserve major conjoined areas of particular kinds of land-scape in their natural state or in a substantially unaltered condition.

Special provisions on how the area shall be conserved and administered are issued for each national park. Limitations may be imposed on the possibility of using in various ways land and water areas in national parks.

The first nine national parks were established as early as 1909: Abisko, Garphyttan, Gotska Sandön, Hamra, Pieljekaise, Sarek, Stora Sjöfallet, Sånfjället and Ängsö. At present there are 25 national parks in Sweden. The most recent park established is Trestickla in Dalsland. The Government has recently proposed that Färnebofjärden in the lower part of Dalälven is designated as a national park.

Nature reserves and cultural reserves

Land and water areas may be declared nature reserves by the county administrative board or the municipality. The purpose of this shall be to preserve biological diversity, conserve and protect valuable natural environments and satisfy the needs of the area for outdoor activities. An area required to protect, reinstate or create new valuable natural environments or living environments for species of special protective value may also be declared to be a nature reserve.

The Environmental Code's protective form 'nature reserve' replaces the previous protective forms of 'nature reserve' and 'nature conservancy area'. At the same time the rules are supplemented with new provisions whereby land and water areas may be declared to be cultural reserves. The purpose with this should be to protect valuable culturally characteristic landscapes.

In a decision to create a nature reserve or cultural reserve, the required limitations on the right to use land and water areas must be stated. Examples of such limitations include prohibition against building, erection of fences, ditching, tree-felling, hunting, fishing and use of pesticides. A limitation may involve prohibition of access to the area for the whole or part of the year. Furthermore, the landowner may be obliged to tolerate the construction of, for example, roads or resting huts or thinning out and clearing work. It is indicated by the chapter of the Environmental Code dealing with compensation that landowners are entitled, in certain cases, to compensation for damage.

The county administrative board or municipality may issue a relaxation from the regulations applicable in a nature reserve or cultural reserve. A relaxation may only be granted if damage to the natural or cultural value is compensated. The compensation measures need not necessarily take place within the reserve.

Natural monuments

A specially distinctive natural object may be declared to be a natural monument by the county administrative board or municipality, if it is in need of special protection or care. Examples of such objects are old oak trees, rock formations and cauldrons. Today it is rather unusual for objects to be declared natural monuments.

Biotype protection areas

Small land and water areas that comprise living environments for threatened species of fauna and flora or which are otherwise especially worthy of protection may be declared to be biotype protection areas. Such declarations may relate to individual areas or all areas of a particular kind.

A decision that a particular area should be a biotype protection area is made by the county administrative board or the national board of forestry. Such individual decisions may be issued concerning, *inter alia*, meadows, screes, forested ravines, alder marshes and ancient hazel groves. General decisions that all areas of a particular kind should be biotype protection areas are made by the Government instead. Examples of the latter areas are avenues, springs with surrounding wetlands in agricultural land, uncultivated stone mounds in agricultural land and willow banks.

Measures may not be taken within biotype protection areas that may harm the natural environment. Relaxations may only be granted in those cases where the Government has decided that all areas of a particular kind should be biotype protection areas.

Fauna protection areas and flora protection areas

If, in addition to the special species protection under Chapter 8 and the provisions of the hunting and fishing legislation, special protection is required for a species of fauna or flora in an area, the county administrative board or municipality may limit the hunting or fishing rights or the rights of the public or landowner to stay in the area. This form of protection will be used to protect, *inter alia*, birds and seals.

Shore protection areas

A special shore protection applies by the sea, inland lakes and watercourses. The purpose of shore protection is to protect the preconditions for outdoor activities of the public and to preserve good living conditions of fauna and flora on land and in water.

Shore protection comprises, according to the main rule, generally all land and water areas up to 100 metres from the shoreline. The area may in individual cases be extended to at most 300 metres from the shoreline. If the area is obviously of no significance for the satisfaction of the purposes of the shoreline protection, a decision may instead be made to limit the shoreline protection. The protection may also be limited if the area is subject to a detailed plan or to area regulations under the Planning and Building Act.

Within the shoreline protection area a prohibition applies against all measures, for example, construction of new buildings, fences or piers or the placement of waterline cabins for leisure houses. The county administrative board or municipality may, in certain circumstances, grant relaxation from the prohibition.

Environmental protection areas

A major land or water area may be declared to be an environmental protection area by the Government, if special rules are required because the area is exposed to pollution or does not satisfy an environmental quality norm. An older form of protection corresponding to this has been used to protect Ringsjön in Scania and Laholm Bay.

The Government or the county administrative board shall issue regulations for environmental protection areas concerning protective measures, limitations and other precautionary measures to be taken when conducting activities within the area. An example of such a precautionary measure is the limitation of the use of manure.

Water protection areas

A land or water area may be declared to be a water protection area by the county administrative board or municipality in order to protect ground or surface water supplies that are used or which

may be used as a source of water. The county administrative board or the municipality may issue rules limiting the right to use the land units affected by a water protection area. A prohibition may, for example, be issued against dealing with petroleum products and other chemicals, spreading of manure or use of pesticides, infiltration of domestic wastewater and municipal drainage water together with boat traffic.

Interim prohibition

When a question has been raised about whether an area or an object should be protected as a nature reserve, cultural reserve, natural monument or water protection area, the county administrative board or the municipality may issue prohibitions, valid for at most three years, against measures being taken that contravene the purpose of the intended protection. The prohibition may in special circumstances be extended for a further two years at the most.

Special protection areas and special conservation areas

The Government may declare an area to be a special protection area, if the area under the EC Bird Protection Directive is of particular significance. Furthermore, an area shall be designated as a particular conservation area under the EC Species and Habitat Directive if the Commission has designated the area as one of interest to the Community.

Special protection and special conservation areas do not constitute independent forms of protection. The necessary protection must exist in accordance with other provisions of the Environmental Code or other legislation, for example, the rules concerning nature reserves. Relaxations from the regulations for such a nature reserve may not be issued without the permission of the Government. However, this does not apply if it is obvious that the activity will not cause more than insignificant harm to the nature value of the area.

Special provisions for the protection of fauna and flora species (Chapter 8)

Fauna and flora species are protected by various provisions of the Environmental Code and other legislation, primarily hunting and fishing legislation. These provisions are supplemented by special provisions on the protection of fauna and flora included in Chapter 8 of the Environmental Code.

Prohibition against harming fauna and flora species

Prohibitions against killing, injuring or capturing wild living animals or to take or damage the egg, roe or nests of such animals will be issued under the provisions of the Environmental Code. Regulations may be made if there is a risk that a species of fauna may become extinct or exposed to plundering or if it is required to comply with the international obligations of Sweden.

Furthermore, a prohibition may be issued against the removal, injury or taking of seed or other parts from wild living animals. Such regulations may be made if there is a risk that a species of flora may become extinct or exposed to plundering or if it is required to satisfy the international obligations of Sweden.

Transplantation of exotic species

Prohibitions may be made or special conditions imposed for the transplantation of specimens of fauna or flora species in nature in accordance with the provisions of the Environmental Code. Transplantation also includes stocking. The most notable examples in Sweden have been the release of mink, cambarus, the so-called arion lusitanicus, hogweed and shore pine.

Trade in fauna and flora

In order to protect wild living fauna and flora species, regulations may be issued concerning the import and export, transport, storage, preparation, display and exhibition and trade with fauna and flora. This also applies to handling and possession of eggs, roe or nests or of products that have been extracted from fauna or flora. The regulations may relate to measures both with living and dead fauna or flora. Even measures concerning parts of fauna and flora and also plant seeds may be covered.

PART THREE

Special provisions concerning certain operations

Environmentally hazardous activity and health protection (Chapter 9)

Of course the Environmental Code's general rules, for example the general rules of consideration, apply to environmental hazardous activities and to other measures that may affect health protection. Furthermore, Chapter 9 of the Environmental Code contains special provisions on environmentally hazardous activities and health protection.

The concept of 'environmentally hazardous activity'

Environmentally hazardous activity means all use of land, buildings or fixed installations that involves an emission to land, the atmosphere or water. The same applies to such use as entails other nuisance to human health or the environment, for example, by noise, vibration or radiation. In contrast to the current rules, ionising radiation, for example gamma, x-ray and particle radiation, are also included.

To be regarded as comprising an environmentally hazardous activity, the activity does not need to be hazardous to the environment in the individual case. Nor need too much be read into the word activity. The concept 'use' should be viewed in a long-term perspective, which means, for example, that a rubbish dump were waste is no longer deposited is covered as long as it may result in pollution. It is the effect of the activity and not the actual running of the operation that is decisive.

General rules for environmentally hazardous activity

The power to issue general regulations concerning environmentally hazardous activity has been significantly extended under the Environmental Code. The Government may issue regulations or prohibitions, applicable to parts of Sweden, against the emission of wastewater, solid substances or gas or the collection of solid substances. This applies if the activity may result in a water area, land or groundwater being polluted or affected in another way. The provisions come into question as regards, for example, the prohibition of emissions to a lake that is of importance for the supply of drinking water or which contains rare or particularly valuable species of fauna and flora.

The Government may also in other cases issue rules concerning prohibitions, protective measures, limitations and other precautionary measures. The intention is that the powers granted will

be used partially to absorb EC legislation in Swedish law and satisfy other international obligations and also to issue regulations of a general nature for a particular sector. The regulations may be capable of replacing permit determinations in individual cases.

Permits and notification duty for environmentally hazardous activity

The Government will, under the Environmental Code, lay down requirements for permits or to give notification concerning environmentally hazardous activities. This is already done today with the so-called A, B and C lists. Corresponding lists will apply after the Environmental Code has entered into force.

Those environmentally hazardous activities that require a permit from the Environmental Court will be scheduled on the A list. The B list will comprise those environmentally hazardous activities in respect of which permits will be considered instead by the county administrative boards or municipal boards. Finally, the C list will include environmentally hazardous activities that are subject to a duty to give notification. Such notification must be given to the county administrative board or municipality.

Even if an activity is not subject to a permit obligation, the supervisory authority may in a particular case require the party conducting the operation to apply for a permit if there is a risk of significant pollution or other substantial nuisance.

Even alterations of existing activities may require an application for a permit. In such cases the provisions now require that an overall assessment should be made of the entire operation. This will avoid several permit decisions being in force for one operation; otherwise each individual permit would apply only to the part that has altered on a particular determination of a permit. However, such an overall assessment will not be made in the case of minor alterations. Even existing activities, which have not altered as such but commenced before the duty to obtain a permit was introduced, will be made subject to the permit obligation. This will even apply to activities that under the previous rules had obtained an exemption from the requirement to have a permit.

At present, the permits system in principle only applies to emissions made by an environmentally hazardous activity. A broader assessment will be made under the Environmental Code. Even questions concerning the management of natural resources and use of chemicals will be considered. Furthermore, it will be possible to have joint processing of a case concerning both a permit for an environmentally hazardous activity and a water undertaking, if the case has the same applicant and relates to the same activity/ undertaking or activities/ undertakings that are connected with each other.

Health protection

The Environmental Code contains special provisions intended to prevent nuisances to human health arising. This refers to a disturbance that according to a medical or hygienic evaluation may have a detrimental effect on health. Disturbances that are trivial or purely temporary are not covered. The definition is somewhat wider than the previously used expression 'insanitary nuisance'.

Thus, housing and premises for public purposes must be used in such a way that nuisance to human health do not arise. Housing and premises must be kept free from infestations and other pests. Installations for groundwater supply must be established and used in such a manner that nuisance to human health does not arise. Municipalities may introduce permit or notification duties for new groundwater supplies in areas subject to water shortages. The requirement for a

permit may also be introduced to keep animals within areas subject to a detailed plan or area regulation, provided such regulations are required to prevent nuisance to human health arising.

Polluted areas (Chapter 10)

The Environmental Code clarifies the liability for after-treatment of polluted land and water areas. The rules are based on the Polluter Pays Principle (PPP).

Liability for after-treatment rests primarily with the party conducting the activity. This also applies to parties that conducted activities formally. In the second instance it is the landowner that is responsible. The preconditions for this are that there is no activity operator who can perform or pay for after-treatment and that the landowner at the time of the purchase of the property knew about the pollution or ought to have discovered it. As regards a land unit that is owned for private housing, it is a precondition for liability that the purchaser really knew about the pollution. If several activity operators or landowners are responsible they will normally be liable jointly.

After-treatment liability means that the party responsible must, to a reasonable extent, perform or pay for the after-treatment measures necessary to counteract damage or nuisance to health or the environment. When the extent of the liability is to be decided, matters to be taken into account include the length of time that has passed since the pollution occurred and what obligation the activity operator had under the rules then applicable to prevent future injurious effects. The liability for after-treatment cannot become time-barred.

It is indicated by the transitional provisions of the Environmental Code that the liability to remedy damage and perform after-treatment is to apply to an environmentally hazardous activity that has been continued after 30 June 1969.

A party who owns or uses real property must immediately advise the supervisory authority if pollution is discovered at the property. The obligation to provide information even applies if the area was previously considered to be polluted.

The county administrative board must declare that land or water areas to be an environmental risk area if the area is so severely polluted that, having regard to the risks for human health and the environment, it is necessary to lay down limitations on the use of land or other precautionary measures. The regulations may mean that certain measures should linked with conditions or be preceded by notification to the supervisory authority. The rules may relate to, for example, digging, excavation, building measures or alteration of land use.

The following may be mentioned as an example of a situation where an area may be declared to be an environmental risk area. Chlorinated solvents have leaked out of a laundry. The groundwater supply for the district has been ruined. There is a risk that gas from the solvents has collected under house foundations and floors. The solvents spread in a complicated way through the soil and groundwater in a rather concentrated form and collect in various places.

Water undertakings (Chapter 11)

The common provisions of the Environmental Code, including *inter alia* the general rules on consideration, apply to water undertakings of course. This means that the environmental aspects will have greater significance when considering water undertakings. Furthermore, there are provisions specially directed at water undertakings in Chapter 11. Besides the Environmental Code

there are a large number of rules on water undertakings that do not have the same environmental connection. These are included in the Water Undertakings (Special Provisions) Act.

The concept of 'water undertaking'

Water undertaking refers to a number of various measures in water and with water. Examples of water undertakings include: the erection, alteration, storage of water in and demolition of dams and other installations in water; filling in and dredging in water areas; drainage of surface and groundwater; and the introduction of water to increase groundwater quantities.

Special rules of consideration for water undertakings.

The general rules of consideration in Chapter 2 of the Environmental Code are supplemented by special rules of consideration for water undertakings in Chapter 11. Amongst other things, a holistic socio-economic assessment shall be made of the benefit of the undertaking. A water undertaking may only be conducted if the advantages from the general and individual viewpoint exceed the expense and damage caused by the undertaking. Furthermore, there is a rule that provides that a water undertaking must be conducted which does not make it more difficult for other operations that may in the future be assumed to be concerned with the same water availability and which promote important objectives. Finally there is a significant rule concerning consideration being taken of fishing. A person who desires to conduct a water operation that may harm fishing is, under this rule, liable to construct installations that enable fish to pass by, release so much water as the fish require and also take other measures such as stocking fish.

The duty to obtain a permit for a water undertaking

According to the main rule, a permit is always need for a water undertaking. There is a general exemption that applies if it is clear that neither a public or private interest is harmed by the effects of the water undertaking on the water conditions. Nor is a permit needed for specially listed water undertakings, for example, wells for single or double family dwellings. The permit or duty to give notice for individual wells may have been introduced under the health protection rules of the Environmental Code.

A permit is always required for land drainage except in the case of drainage of agricultural land by drainage pipes. In the latter case a permit is only demanded if it is probable that a public or private interest will be harmed. In order to conserve wetlands, the Government may prohibit land drainage. There are such prohibitions today applicable to large parts of southern Sweden.

An application for a permit for a water undertaking is considered by the environmental court. The application for a permit for drainage is considered by the county administrative court. In some situations, the county administrative board must hand over the application matter to the environmental court, for example, if someone other than the applicant will participate in the undertaking.

Maintenance liability

A person who owns a water undertaking is liable to maintain it. This rule is important to avoid serious accidents as a consequence of, for example, dam bursts. In the event of a dam accident, the owner is liable to pay damages for losses, even if he was not careless.

Quarries, agriculture and other operations (Chapter 12)

Quarries

Chapter 12 of the Environmental Code contains special provisions about quarries for rock, stone, gravel and the like. A permit is required from the county administrative board to conduct quarry operations. A new requirement is that a permit may be demanded even if the quarry is for domestic needs, that is to say when the material is only to be used within the property for its own needs.

When considering an application for a permit to quarry, the need of the material should be balanced against the anticipated damage resultant damage. A permit may not be granted for a quarry that may be feared to adversely affect the living conditions for any fauna or flora that are threatened, rare or otherwise require special consideration. This is also new compared with the present law.

Notification for consultation

If an activity or a measure that is not subject to a permit or duty to give notice under other provisions of the Environmental Code will materially alter the natural environment, notification for consultation should be made to the supervisory authority. Rules will be made about notification for consultation always needing to be given in the case of particular kinds of activities or measures. When notification for consultation must take place, the operation or measure may only be commenced six weeks after the notification has been given, at the earliest.

The supervisory authority may order the person liable to give notice to take those measures necessary to limit or counteract damage to the natural environment. If such measures are not sufficient the authority may prohibit the activity. The person conducting the activity is entitled to compensation in accordance with the provisions in Chapter 31.

Agriculture

The general rules for consideration in Chapter 2 of the Environmental Code also apply, of course, to measures within agriculture. Such measures may also be environmental hazardous activities or water undertakings subject to the provisions in Chapters 9 and 11. To the extent that chemicals are used in agriculture, Chapter 14 applies. Furthermore, there are special provisions concerning environmental considerations in agriculture included in Chapter 12.

Rules may be issued under Chapter 12 about taking into account nature and cultural values when tending agricultural land and other land use in agriculture. Rules may also be issued about limitation of the number of animals at a farm, precautionary measures in the use of manure and cultivation.

Permit duty to satisfy EC law

It is indicated by the EC Directive on Environmental Impact Assessments that certain public and private projects require a permit. Such projects normally comprise environmentally hazardous activities or water undertakings and are subject to the permit requirements of the Environmental Code. However, it is also provided by the Directive that long-distance water pipes should also be subject to permits. For such installations, permits cannot be prescribed according to any other provision of the Environmental Code.

Genetic technology (Chapter 13)

Of course the general rules of consideration under the Environmental Code also apply to genetic technology activities. Furthermore, there are special rules contained in Chapter 13.

According to the provisions of Chapter 13, so-called sealed use and intentional plantation of genetically modified organisms must be preceded by an investigation of the health and environmental risks. The same also applies before a product that contains genetically modified organisms is released onto the market. Particular ethical considerations must be taken into account in the sealed use and intentional plantation, and also when products are to be released onto the market. The rules may be issued with requirements of marking of products containing or consisting of genetically modified organisms.

Permits are normally required for genetic technology operations. Ethical considerations must be taken into account when considering permits.

A special board, the Genetic Technology Board, will monitor developments in the genetic technology field, monitor the ethical issues and provide advise on the use of genetic technology.

Chemical products and biotechnical organisms (Chapter 14)

Even as regards dealing with other measures with chemical products and biotechnical organisms, the general rules on consideration in Chapter 2 of the Environmental Code apply. The requirement for knowledge and product choice principle are of particular importance. Furthermore, Chapter 14 contains special rules about chemical products and biotechnical organisms. In all material respects, the regulation of biotechnical organisms is new.

The concepts 'chemical product' and 'biotechnical organism'

Chemical product means a chemical substance and preparations of chemical substances. The provisions on chemical products shall also be applicable to goods containing or which have been treated with chemical products. Examples of such goods are impregnated timber, goods that contain asbestos and goods containing mercury.

Biotechnical organism means a product that has been specially produced to act as a pesticide or for some other technical purpose, for example, as a detergent, and which completely or partially consists of or contains living micro-organisms, nematodes (roundworms), insects or spiders. In this connection, micro-organism also means virus.

Environmental and health investigation

A party who manufactures or imports chemical products or biotechnical organisms shall ensure that there is a satisfactorily environmental and health investigation. The obligation regarding investigation applies irrespective of whether there are any concrete fears. It applies continually and therefore does not end when a product or organism has been introduced onto the market.

Product information

A party who commercially manufactures, imports or transfers a chemical product or biotechnical organism must, by labelling, provide the information necessary to protect human health or the environment. Alternatively, the product information may be effected in another manner than by

marking, for example, by an information sheet being enclosed with the chemical product or biotechnical organism.

A party who commercially handles, imports or exports a chemical product or biotechnical organism shall also provide information about the product and organism to the Chemicals Inspectorate.

Product register

Chemical products that are commercially manufactured in Sweden or imported to Sweden must be registered in a product register. A corresponding register may be prepared for biotechnical organisms.

Advance notification, permit and approval

The requirement of advance notification may be introduced for the manufacture and import of chemical products and biotechnical organisms that have not previously been used in Sweden. Furthermore, a permit may be required for the import of especially dangerous chemical products and biotechnical organisms from countries that are not members of the European Union and for the commercial transfer and other handling of particularly dangerous products and organisms.

Special requirements apply to chemical or biological pesticides. These may not be imported from countries outside the EU, released onto the market or be used without prior approval. Chemical or biological pesticides that have not been approved or which are not subject to an exemption from the requirement of approval may be used as pesticides only if it is obvious that their use does not involve a risk to human health or the environment.

Spreading pesticides

Chemical or biological pesticides must be spread in such a manner that human health is not harmed or humans caused other nuisance and so that the environmental impact is as little as possible. Pesticides may not be spread from aircraft. Nor may pesticides be spread over forestland to combat brushwood.

Fuel

In order to reduce the emission into the atmosphere of those substances that can cause nuisance to human health or the environment, regulations may be made on the quality and handling of fuel. Petrol intended for motor vehicle power or heating is split into environmental classifications.

The obligation to advertise about injurious effects

A party who manufactures or releases a chemical product or biotechnical organism onto the market must immediately advise the competent authority if it is learned that the product or organism might be harmful.

Prohibition

If it is of particular importance from the health or environmental viewpoint, a chemical product or biotechnical organism may be prohibited generally. This may be appropriate in the case of, for example, carcergenious products. It may also be relevant in the case of products whose feared injurious effects in the individual case though not of a serious kind can through wide-spread use result in injurious effects, such as for example cosmetics, hygiene products and pesticides.

Waste and producer responsibility (Chapter 15)

Rules about waste and producer responsibility are contained in Chapter 15 of the Environmental Code. The chapter also contains provisions about dumping and litter.

The concept 'waste'

Waste means every object, material or substance included in a waste category and which the holder disposes of or intends to or is obliged to dispose of. An appendix to an ordinance will list the categories of waste. The appendix will reflect the corresponding appendix to the EU Waste Directive.

Producer responsibility

Regulations about producer responsibility may be issued under the Environmental Code. Producer responsibility means that the producer must ensure that the waste is collected, transported away, recycled, reused or disposed of in such a manner as may be necessary from the viewpoint of health and environmentally acceptable waste handling. Such regulations may be issued as regards waste from the goods and packages that producers manufacture, import or sell and the waste from the operations they conduct. The expression 'producer', in this connection, also comprises a party who imports or sells goods or packages.

To date, the Government has made rules on producer responsibility in four areas, namely recycled paper, tyres, packages and automobiles.

Municipal public cleansing

Every municipality should be responsible for ensuring that domestic waste is transported to processing installations and that the waste is recycled or disposed of. However, the obligation does not apply to waste subject to producer responsibility. Furthermore, regard should be taken to the possibilities for owners and occupiers of property taking care of domestic waste in an acceptable manner themselves, for example by composting.

The Government may extend the municipal responsibility to also comprise other waste than domestic waste, though not waste subject to producer responsibility. This may only be done if it is justified for health and environmental reasons.

Municipal cleansing rules

Every municipality shall have cleansing rules that contain regulations about handling waste, which shall apply to the municipality, together with a waste plan. The cleansing regulations shall state the conditions under which owners and occupiers of property must themselves take care of their waste.

The waste plan shall contain information about waste within the municipality and the measures taken by the municipality to reduce the quantity of waste and associated danger.

Handling waste

When waste is to be transported away through the agency of the municipality or a producer, the waste may not normally be composted or buried or in another way recycled or disposed of by the owner or the occupier of the property. Special regulations may be issued about sorting at source. Regulations may also be issued about prohibitions against depositing combustible or organic waste.

An obligation to acquire a permit or give notice may be introduced for commercial transport of waste. Furthermore, special conditions may be imposed, such as the carrier being liable to report on the quantity, nature and origin of the waste. Conditions may also include demands for special documentation to accompany the carriage. A party who commercially causes waste to be produced shall be responsible for engaging a special carrier.

In order to provide the municipality with the possibility of checking flows of waste, an obligation may be introduced for the party causing waste to be produced or dealing with waste to provide the information necessary for supervision by the municipality. Only commercial operations may be subject to the information obligation.

Littering

No one may cause litter outdoors at a place where the public has access or insight. The provision is directed to all those who cause litter, thus even property owners, and irrespective of whether it is in the countryside or urban areas.

Dumping

Waste may not be dumped or burned within Swedish waters or economic zone. Nor may waste be dumped in the high seas or burned on Swedish vessels or aircraft. The Government may issue a relaxation of the dumping prohibition. This ought only to be appropriate in the case of dredgings.

PART FOUR

Examination of cases and matters

Generally on examination (Chapter 16)

Examination authorities

The Government, county administrative boards and other administrative authorities, the municipalities, environmental courts, the Supreme Environmental Court and the Supreme Court determine cases and matters under the Environmental Code. However, cases concerning penalties and forfeiture are considered by district courts with appeals to the courts of appeal and Supreme Court in the normal manner.

Common provisions on permits, approvals and relaxations

Permits, approvals or relaxations may be issued for a limited period. According to the EC Groundwater Directive, permits should be limited to four years, if there is a risk that groundwater may be polluted by certain substances. It may also be appropriate in other cases to limit the period of activities with great environmental impacts, as there will then be an automatic reconsideration of the entire operation in conjunction with the application for a new permit.

Permits, approvals or relaxations may be issued subject to conditions. Conditions will be based on the general rules on consideration in Chapter 2 or on other provisions of the Environmental Code. It is important that the conditions are formulated clearly so that no doubt will arise about their meaning. Conditions may relate to a number of different things. In the event of a relaxation of the prohibition against building in a shoreline protection area, conditions that might be appropriate include, for example, that a fence is erected between the building and the water to indicate that the public has access to the area immediately adjacent to the shoreline. In the case of environmentally hazardous activities, conditions may be issued, *inter alia*, about a particular purification equipment needing to be used, that the equipment should be continuously checked and maintained, that emissions may not take place during special weather conditions, that noise barriers are erected, that chemicals will be handled in a particular manner and also that the operator of the activity provides collateral for the expenses for after-treatment and other reinstatement measures. In the case of water undertakings, it will be normal to have conditions that the water at a dam may not exceed or be less than certain levels and that work in water must be performed so that mudding is averted.

Permits, approvals or relaxations may not be issued in contravention of a detailed plan or area regulations under the Planning and Building Act. Minor deviations may, however, be allowed if the purpose of the plan or regulations are not counteracted. The municipality may also, to a certain extent, by a plan prevent that an activity starts operating. However, it should be noted that the fact that an activity is anticipated in a plan does not automatically mean that the operation will be approved when considered under the Environmental Code. The other provisions of the Environmental Code must of course be satisfied.

Permits, approvals or relaxations may not be issued for a new activity that contributes to the contravention of an environmental quality norm. The operation may, however, be permitted if the party conducting the activity takes such measures that the nuisance from other activity ceases or reduces so that the possibility of satisfying the environmental quality norm increases to a not unsubstantial extent. Such measures may be taken even in the case of activities that are conducted by someone else.

Permits, approvals or relaxations may be refused to a party that has not satisfied its obligations under previous permits, approvals or relaxations. This also applies when a party has previously failed to apply for the necessary permit, approval or relaxations. It is not necessary that it is the same natural or legal person that has been neglectful previously. For example, neglect on the part of a legal person may result in another legal person with basically the same owner or other management being refused a permit. Failure on the part of a legal person may also result in a permit not being given to a natural person and vice versa.

Right of appeal

Judgments and decisions under the Environmental Code, in accordance with the main rule, may be appealed against by the person to whom the judgment or decision relates if the determination went against him or her. The Environmental Code shall have a uniform concept of material interest. A person who may be caused damage or exposed to other nuisance by the operation shall be considered to have a material interest and consequently entitled to appeal. It is thus not necessary that the person owns or has any interest in real property that is affected.

An appeal may also be made by public authorities, municipal boards and others, in accordance with special rules.

An important new provision of the Environmental Code is that environmental organisations are also entitled to appeal against judgments and decisions on permits, approvals or relaxations. To have a right of appeal an association must have conducted its operations in Sweden for at least three years and have at least 2,000 members.

Consideration of permissibility by the Government (Chapter 17)

The Government shall consider the permissibility of a number of specially listed new activities. As examples of such activities the following may be mentioned: iron and steel works; pulp factories and paper mills; installations for nuclear operations; major installations for the treatment of hazardous waste; and large hydro electricity plants. A new provision is that this shall also apply to motorways and trunk roads and other roads with at least four driving lanes and a length of at least ten kilometres, railways intended for inter-city traffic and the construction of new railway tracks of at least five kilometres for existing railways for inter-city traffic, public shipping lanes and also airports with a runway length of at least 2,100 metres.

The Government may even in certain cases reserve the right to consider the permissibility of activities in addition to those listen in Chapter 17.

The consideration by the Government shall take place as a step in the ordinary permit determination under the Environmental Code. This means that the applicant will apply in the ordinary manner to the ordinary permit authority, that is to say the environmental court usually. The permit authority deals with the case in the ordinary manner and subsequently passes the matter over to the Government together with an opinion. Following this, the Government considers the matter of permissibility. In this connection the primary issue to be dealt with is whether the operation may be established and in that event where it should be located. If the Government permits the operation the matter is referred to the permit authority again who must issue the permit. The permit authority is this case bound by the Government decision but must lay down conditions for the operation.

The Government may allow an operation only if is supported by the municipal assembly. However, the municipal veto does not apply in the case of water undertakings or transport installations. The Government also has the possibility in some other situations to permit an activity against the wishes of the municipal assembly.

Consideration by the Government of matters on appeal (Chapter 18)

The Government considers, on appeal, decisions by state authorities on matters concerning the establishment, alteration or revocation of national parks, nature reserves, cultural reserves, natural monuments, shore protection areas, environmental protection areas or water protection areas. However, this does not apply to questions of compensation. It should be noted that it is general decisions that are appealed against to the Government. An individual decision on, for example, a relaxation from a prohibition applicable to a nature reserve, is appealed against to the environmental court.

The Government also considers on appeal decisions by the Surgeon General, for example, relating to supervision of national defence operations.

Consideration by administrative authorities and municipalities (Chapter 19)

The county administrative boards and other administrative authorities together with the municipalities consider a number of matters under the Environmental Code. For example, it is the county administrative boards or the municipalities that make decisions to form nature reserves. Even questions concerning relaxations of prohibitions within such areas or within, for example, shore protection areas are made by the county administrative boards or municipalities. The county administrative boards or municipalities also consider questions of permits for environmentally hazardous activities when such a determination should not be made by the environmental court. Furthermore, the county administrative boards normally consider questions on permits for land drainage.

Examples of other administrative authorities that consider matters under the Environmental Code include the National Board of Forestry who consider issues concerning the establishment of biotype protection areas in forestry land.

The examination by the county administrative boards of permits for environmentally hazardous activities will assume a stronger form. This will be done by an examination authority being created, especially for the purpose, which will be independent of, though administratively affiliated to, the county administrative board. The authority consists of a lawyer and a person with experience of environmental issues. The procedure at the county administrative board will be adapted to the procedure of the environmental court.

Decisions of the municipalities will, according to the main rule, be appealed against to the county administrative board. Decisions of the county administrative board will normally be appealed against to the environmental court.

Courts (Chapter 20)

Regional environmental courts will be created with the introduction of the Environmental Code. These replace the National Licensing Board for Environmental Protection and the Water Courts. The district courts appointed by the Government will be environmental courts. The Environmental Court of Appeal comprises part of the Svea Court of Appeal. The Supreme Court is the final appeal court.

The environmental courts consider in the first instance, *inter alia*, cases on permits for environmentally hazardous activities or water undertakings and cases concerning compensation or damages. On appeal, the environmental courts consider decisions of the county administrative boards and other government agencies under the Environmental Code, except in the exceptional cases where an appeal is to be made to the Government.

In cases considered by the court as a first instance, the environmental court applies the provisions concerning contentious matters contained in the Swedish Code of Judicial Procedure. These are supplemented by a number of procedural provisions in the Environmental Code. In appeal cases, the court applies the Administrative Court Procedure Act, supplemented by provisions in the Environmental Code.

The environmental court consists of a chairman who must be a legally qualified and experienced judge in the district court, an environmental adviser and two expert lay judges. An additional legally qualified judge and an environmental adviser may form part of the Court. The environ-

mental adviser must have technical or scientific training and experience of environmental issues. One of the expert lay judges must have experience in issues that fall within the operational field of the Environmental Protection Agency. The other expert lay judge must have experience of industrial or municipal operations. When processing matters otherwise than by a main hearing and in some other situations, the environmental court comprises a quorum with the chairperson and an environmental adviser.

The Environmental Court of Appeal consists of a legally qualified and experienced judge and an environmental adviser. The Environmental Court of Appeal constitutes, according to the main rule, a quorum with four members, of which three must be legally qualified.

Cases in the Environmental Court (Chapter 21)

Cases considered by the environmental court at first instance are split between application cases and summons cases. Application cases include, *inter alia*, cases on permits for environmentally hazardous activities and water undertakings. Examples of summons applications are cases for compensation for environmental damage.

There are special rules for consolidation of cases and matters. According to these rules, for example, a joint permit consideration may take place of an environmentally hazardous activity and water undertaking.

Procedure at the environmental courts in application cases (Chapter 22)

An application in an application case must contain a great deal of information, including amongst other items an environmental impact statement and information on the consultation that has occurred. If an application is taken up by the court for consideration, the environmental court shall issue a public notice, which must be published in local newspapers.

The Environmental Protection Agency, the Legal, Financial and Administrative Services Agency and the county administrative board may present actions in cases to protect environmental interests and other public interests. A municipality may bring an action to protect environmental interests and other public interests within the municipality.

The continued preparation of the case may be in writing or verbal. The environmental court must during the preparation ensure that the investigation in the case assumes the direction and scope necessary. Normally, a main hearing must be held. Judgment must be issued within two months from the conclusion of the main hearing.

Litigation in the Environmental Court of Appeal and Supreme Court (Chapter 23)

The judgments or decisions of the environmental court may be appealed against to the Environmental Court of Appeal. Leave to appeal is required, except when cases commenced in the environmental court. If leave to appeal is not granted, the judgment or decision of the environmental court remains in force. The procedure in the Environmental Court of Appeal is, to a greater extent than in the environmental court, in writing.

The judgments and decisions of the Environmental Court of Appeal in cases determined in the instance by a municipality or by an administrative authority may not be appealed against. Other-

wise, the judgments and decisions of the Environmental Court of Appeal are appealed against to the Supreme Court. Leave to appeal is required.

Validity, duration and reconsideration of permits, etc. (Chapter 24)

Judgments and decisions on permits for environmentally hazardous activities or water undertakings apply against everybody as regards issues considered in the judgment or decision. However, there are some limitations to the legal force of a permit judgment or permit decision.

The permit lapses if the permit holder does not observe the provisions concerning the period in which work must be completed. An application for extension of time may, however, be made before the prescribed period has expired.

The permit authority may completely or partially revoke a permit and prohibit continued activity in a number of listed situations. This may happen, *inter alia*, if the applicant has misled the permit authority, if the permit is not complied with and the contravention is not of minor significance or if some nuisance of substantial importance that was not anticipated when the operation was permitted arises.

The permit or conditions of the permit may also be reconsidered. Reconsideration may take place after ten years or even within a shorter period in some cases. Examples of this possibility include where the activity significantly contributes to the contravention of an environmental quality norm, where an unforeseen nuisance of some significance has resulted or where, from the health and environmental viewpoint, substantial improvement can be attained by reason of some new process or purification technique. However, the permit authority may not issue such extensive conditions that the activity can no longer be conducted or whereby it is made substantially more difficult.

Litigation costs and similar expenses (Chapter 25)

In application cases concerning water undertakings, the applicant must pay his own and the opposing party's expenses in the environmental court. In such cases on appeal the applicant must pay for his own costs in the higher court and for those costs incurred by the opposing party by the applicant having appealed. Environmental organisations are not entitled to reimbursement for or liable to pay litigation costs.

In cases concerning permits for environmentally hazardous activities, no reimbursement is made for litigation expenses.

PART FIVE Supervision, etc.

Supervision (Chapter 26)

The concept 'supervision'

The Environmental Code emphasises the supervision responsibility of the authorities. Supervision must be aimed at ensuring compliance with the Environmental Code, together with regulations, judgments and decisions that have been issued under the Code. Supervision authorities shall monitor compliance with the Environmental Code and regulations, judgments and decision

and intervene to ensure rectification. The supervisory authority shall also by advice, information and similar activities create the preconditions necessary to attain the objectives of the Environmental Code.

Distribution of supervisory responsibility

Supervision is exercised by the Environment Protection Agency, Surgeon General, the county administrative boards, other government authorities and municipalities as decided by the Government. Every municipality, through the board or boards appointed by it, exercises supervision of environmental and health protection within the municipality, except for such environmentally hazardous activities that require a permit, together with supervision for handling of chemical products and waste management. Furthermore, state supervision may be delegated to the municipalities, provided the municipality has requested this. If a state supervisory authority and a municipality are not in agreement on a matter concerning supervision being transferred, the matter must be determined by the Government if the municipality so requests.

A municipality may reach agreement with another municipality for supervision tasks, completely or partially, to be managed by the other municipality. Examples of such supervision tasks are measurements, inspections and other investigations. However, the municipality may not transfer power to issue decisions in the matter.

Orders and prohibitions

A supervisory authority may issue the orders and prohibitions necessary in an individual case to ensure compliance with the Environmental Code or regulations, permits, conditions or other decisions issued under the Environmental Code. However, more extensive measures than needed in the individual case may not be utilised. An order or prohibition may not limit a judgment or decision concerning a permit that has entered into legal force. However, the permit does not prevent a supervisory authority issuing urgent orders or prohibitions that are necessary to avert health risks or serious environmental damage. Furthermore, the supervisory authority may intervene on matters that have not been assessed when considering the permit.

If the permit authority has issued an order or a prohibition and it is not complied with, the enforcement service may on the application of the supervisory authority enforce the decision. Instead of requesting execution, the supervisory authority may decide that rectification will be effected at the expense of the defaulting party.

Operator's self control and environmental reports

The operator of the activity shall continually plan and control the operation to prevent damage and nuisance. Furthermore, for environmentally hazardous activities that are subject to a permit obligation, an environmental report must be submitted annually to the supervisory authority.

Charges (Chapter 27)

Charges will be levied in respect of the costs of the authority for examination and supervision. The supervision will, as a main principle, be financed by charges. The Government, other authorities and the municipal assembly will determine tariffs for a number of activities.

Municipalities may also impose a cleansing charge for the collection, transport, recycling and disposal of waste performed through the agency of the municipality.

Access (Chapter 28)

Authorities are entitled to access to real property, buildings, other installations and modes of transport to fulfil their tasks under the Environmental Code. In some cases even private persons are entitled to obtain access to land belonging to another, for example, to perform after-treatment of damaged areas. Compensation must be paid for damage and other intrusion arising.

As regards water undertakings, the party conducting the operation is entitled in some specially listed cases to construct installations or implement other measures on land belonging to another.

Penal provisions and forfeiture (Chapter 29)

The Environmental Code contains a number of different penal provisions with their own offence names. The penalties for these offences have been made more severe. In several cases the required subjective element of the offence has been changed from grave carelessness to carelessness of a normal level.

A sentence shall be imposed for various forms of intentionally causing pollution and other damage for the offence of *environmental crime*. If the corresponding offence was committed by carelessness it is called *ausing environmental disturbance*.

Environmentally hazardous handling of chemicals means that someone intentionally or by grave carelessness deals with a chemical product or goods that contain or have been treated with a chemical product without taking the protective measures, product choice or other precautionary measures needed by reason of the inherit properties of the product or goods to prevent or counteract damage to humans or the environment.

Unlawful environmental activity means that someone intentionally or by carelessness commences or conducts an activity without having acquired the necessary permit or similar approval. The offence may also mean that someone violates the conditions of a permit.

A person who in contravention of provisions in the Environmental Code intentionally or by carelessness fails to provide information to an authority or provides incorrect information shall be sentenced for *impeding environmental control*. If the offence instead consists of failing to comply with requirements for labelling of products a sentence will be imposed for *inadequate environmental information*.

A person who intentionally or by carelessness causes litter shall be sentenced forusing litter.

A large number of offences do not have their own names. Among these may be mentioned to intentionally or by carelessness violate the limitations of the right to use land within a nature reserve or the violation of general regulations for environmentally hazardous activities.

Chemical products and other property that has been the subject of offences may be declared forfeited, unless this is manifestly unreasonable. This also applies to the value of property or the gains from such offences.

Environmental sanction charges (Chapter 30)

At present there is a system of environmental protection charges that, broadly speaking, has never been applied. This is replaced in the Environmental Code with a new charge, called environmental sanction charge. The new rules are structured in such a way that it will be possible to apply them more often.

An environmental sanction charge must be paid by a business operator who in the conduct of commercial operations neglects regulations issued under the Environmental Code, violates a permit or condition or commences an activity that requires a permit or is subject to a duty to give notice without such permit or notice. The charge shall be imposed even if the violation has not occurred intentionally or by carelessness. Thus it is founded on strict liability. Furthermore, it is of no relevance whether the business operator had any economic gain from the violation or if the violation involved any nuisance in the particular case.

The environmental sanction fee will be imposed for various kinds of violations in respect of which the Government, by regulations, has determined fees. Thus, the Government will by an ordinance compile a list of various violations with information on the charge for the respective violation. The charge may be 5,000 kronor at least and 1,000,000 kronor at most. If rectification is not effected, the supervisory authority may make a new decision for an environmental sanction charge for a subsequent period. However, the charge does not prevent the imposition of a penalty for the criminal act.

The supervisory authority decides on the environmental sanction charge. The decision may be appealed against to the environmental court. Even if the decision is appealed against it may be enforced.

PART SEVEN

Compensation and damages, etc.

Compensation for intervention by public authorities and on the examination of permits for water undertakings, etc. (Chapter 31)

Compensation in the event of intervention by public authorities

The landowner is entitled to compensation by reason of decision involving land being taken for use or substantial difficulties arising with current land use within the affected part of the property in certain special instances. Among these may be mentioned decisions about nature reserves and cultural reserves, biotope protection areas and water protection areas together with orders and prohibitions under the provisions of Chapter 12 concerning notification for consultation. If extraordinary inconvenience occurs in current use of the property, the landowner is entitled to compulsory sale of the property.

The preconditions for compensation - that current land use within the affected part of the property is made substantially more difficult – were prescribed previously in, *inter alia*, the Nature Conservancy Act. Compensation shall not be paid if it is an altered land use that is made more difficult. Natural measures within forestry for example, tree-felling in various forms, is normally regarded as current land use. A regulation that a nature reserve on a prohibition of tree-felling thus means that the landowner is entitled to compensation.

Compensation will be reduced by an amount that corresponds to that which the property owner is liable to tolerate without compensation. The deduction will correspond with the so-called

qualification level, that is to say the damage lying under the level at which "current land use within the affected part of the property is made significantly more difficult".

Compensation in the event of permits for water undertakings

A person who claims another's property or in another way damages another property by virtue of a permit for a water undertaking must pay compensation for this. The compensation that must be paid should be determined already when the permit is considered. However, there is a possibility of postponing this determination and bringing proceedings for compensation later for unforeseen losses.

Damages for certain environmental damage and other private claims (Chapter 32)

Damage is payable for personal injury and property damage together with pure financial loss that an activity on land has caused to its surroundings. Pure financial loss means financial loss that is not connected to personal injury or property damage. As regards pure financial loss that has not been caused by an offence, this is only compensated if the damage is of some significance.

Liability to pay damages is, according to the main rule, strict. Damage that has not been caused intentionally or by carelessness is, however, only compensated to the extent that the disturbance that caused the damage should not be tolerated having regard to the situation at the place or its occurrence generally under comparable circumstances. Thus, the damages may not be usual for the place or generally usual.

A precondition for the payment of damages is that the damage has been caused by some specially listed disturbance. The disturbances that afford entitlement to compensation are pollution of water areas, pollution of groundwater, changing of groundwater level, air pollution, land pollution, noise, vibration or other similar disturbance. A damage shall be regarded as having been caused by such a disturbance if, having regard to the nature of the disturbance or damage, other possible causes of the damage and the circumstances generally, such causal connection is overwhelmingly likely. This means that the evidential requirements for the causal connection are lower compared with that normally applicable within tort liability law.

If an activity involves a property being wholly or partially without benefit to the owner or if extraordinary difficulty with the use arises, the property or part of the property shall on the demand of the owner be compulsorily purchased by the person conducting the activity. In addition to actions for damages and compulsory purchase, a private individual may institute proceedings in the environmental court for a prohibition against continued operation or to impose protective measures or other precautionary measures. Such an action may be taken against the party conducting an environmental operation without a permit.

Environmental damage insurance and clean-up insurance (Chapter 33)

Everybody who conducts an environmentally hazardous activity that requires a permit or is subject to a duty to give notice must pay an annual charge to the environmental damage insurance and a clean-up insurance. Compensation is paid from the environmental damage insurance to those suffering personal injury or property loss as defined in Chapter 32, provided the injured party is entitled to compensation but for various reasons cannot obtain payment of damages. For example, this may be the result of the party who caused the damage no longer existing, the

party liable to pay damages being unable to afford or refusing to pay, the claim for damages being time-barred or the impossibility of establishing who is liable to pay damages.

Compensation is paid from the clean-up insurance for clean-up expenses that have arisen for the public when a supervisory authority requests the assistance of the enforcement service for the enforcement of its decision. Compensation is also paid when the supervisory authority decides that rectification shall take place at the expense of the defaulting party. A precondition in both cases is that the party responsible for the damage cannot pay. The intention with the clean-up insurance is to reduce the expenses of the State for reinstating polluted areas.